



7/18/03 Appeal Brief  
W/EOT(3)  
S.E.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of: )  
 )  
William M. Kleinfelter ) Art Unit: 3626  
 )  
Serial No.: 09/348,774 ) Examiner: Robert W. Morgan  
 )  
Filed: July 7, 1999 ) Docket No.: 3207/22  
 )  
For: **PRESCRIPTION DATA PROCESSING** ) Appeal No.: Not yet assigned  
 )  
 )  
**SYSTEM FOR DETERMINING** )  
 )  
**NEW THERAPY STARTS** )

APPEAL BRIEF UNDER 37 C.F.R. §1.192

Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450

**RECEIVED**  
NOV 18 2003  
**GROUP 3600**

Sir:

This is an appeal from the decision of Examiner Robert W. Morgan, Group Art Unit 3626, of December 2, 2002, rejecting claims 1-49 in the present application ("the Application"), which is a Continued Prosecution Application (CPA). The December 2, 2002 decision is the second rejection of these claims, the previous rejection of claims 1-49 being in the February 14, 2002 decision of Examiner Morgan in the parent application to the Application.

TABLE OF CONTENTS

A. Copy of FIG. 1 of the present application	Page 2
B. Items (1) through (9) as required under 37 CFR 1.192(c) and MPEP § 1206 (herein labeled as I through IV)	Pages 3-13 and A1- A22

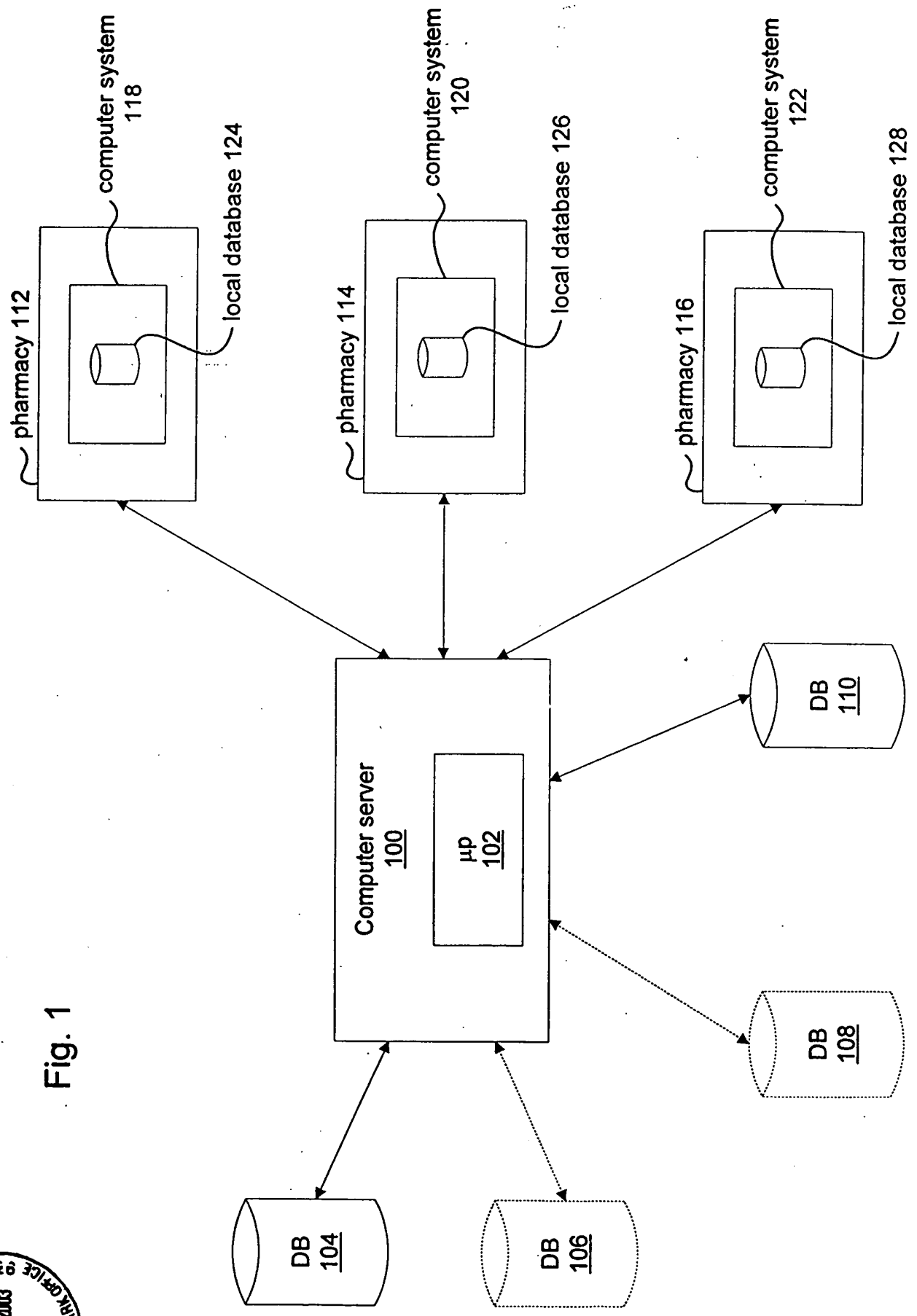
11/14/2003 AWONDAF1 00000077 09348774

01 FC:1402

330.00 OP

A. Copy of FIG. 1 of the present application

Fig. 1





B. Items (1) through (9) as required under 37 CFR 1.192(c) and MPEP § 1206 (herein labeled as I through IV)

**I. REAL PARTY IN INTEREST**

The Application was assigned to Synetic Incorporated on July 6, 1999. Synetic Incorporated subsequently merged into WebMD Corporation. Consequently, WebMD Corporation, which has a place of business at 669 River Drive, Center II, Elmwood Park, New Jersey 07407, is the real party in interest of the Application.

**II. RELATED APPEALS AND INTERFERENCES**

There are no known related appeals or interferences.

**RECEIVED**  
NOV 18 2003  
**GROUP 3600**

**III. STATUS OF THE CLAIMS**

Claims 1-49 are currently pending in the Application. The Office Action mailed on December 2, 2002 rejected claims 1-49 a second time. In the December 2, 2002 Office Action, claims 1-49 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,950,630 to Portwood et al.

For the reasons set forth herein, claims 1-49 are herein appealed, and the Applicant respectfully submits that the rejection of pending claims 1-49 should be overturned by the Board of Patent Appeals.

#### **IV. STATUS OF AMENDMENTS**

There are no amendments filed subsequent to the rejection contained in the December 2, 2002 Office Action.

#### **V. SUMMARY OF THE INVENTION**

The present application describes computer systems and computer implemented methods for processing prescription data for drugs prescribed to patients, as shown in Fig. 1 of the Application included as Section A herein. In some embodiments, prescription data is processed to identify whether a prescribed drug is a new therapy start. Prescription data is received from a customer and entered into a computer system 118, 120, or 122. (Application, page 7, lines 15-19). The entered prescription data is transmitted to another computer system 100 which arranges the received prescription data into a newly created record that includes fields for a Patient ID and a Drug Name, as well as other fields. (Application, page 7, lines 1-5 and 19-20). The computer system 100 is connected to a database 104 that stores records having these same fields. (Application, page 5, lines 18-21 and page 7, lines 1-2). The computer system 100 also has access to a database 110 that contains a list of substantially every drug and the corresponding illnesses for which each drug is prescribed. (Application, page 6, lines 7-9).

The computer system 100 accesses the Patient ID of the newly created record and compares it to the Patient IDs of existing database records. (Application, page 8, lines 4-14). If a match is found, then the prescription drug name in the new record is compared with the prescription drug name in the database record having the matching Patient ID. (Application,

page 8, lines 19-21). The computer system 100 accesses database 110 to determine whether the two prescription drug names are equivalent. (Applicant, page 9, lines 1-2). If the drugs are determined to be not equivalent, then the newly prescribed drug is identified as identified as a new therapy start. (Application, page 10, lines 6-8).

## **VI. ISSUES**

The issue in this appeal is whether claims 1-49 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 5,950,630 to Portwood et al.

## **VII. GROUPING OF THE CLAIMS**

All of the pending claims, specifically, claims 1-49, are treated herein as a single group, without admission and without prejudice.

## **VIII. ARGUMENTS**

The Office Action dated December 2, 2002 (the “December Office Action”) rejected claims 1-49 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,950,630 to Portwood et al. (hereinafter “Portwood”). The Applicant respectfully traverses this rejection and requests that it be overturned for at least the reasons set forth below.

As discussed in more detail below, the Examiner erroneously characterizes the disclosure of Portwood. When properly viewed, it is clear that Portwood fails to teach or suggest many if not all of the elements of the claims of the present application.

This Argument section is divided into two subsections. Subsection 1 discusses the Portwood reference cited by the Examiner in the rejection of the claims. Subsection 2 discusses why all the pending claims, as represented by claims 1 and 26, are patentable over Portwood, and why the rejection is erroneous and should be overturned.

**1. U.S. Patent No. 5,950,630 to Portwood et al.**

Portwood discusses a system including a central server computer, a prescriber computer, a patient message unit, a prescription delivery system, and a payment system. The central server computer includes a pharmaceutical database that stores pharmaceutical data for various drugs including information for each drug such as the drug's Generic Product Identifier (GPI) or National Drug Code (NDC) and recommended dosage and duration ranges for the drug as provided by pharmaceutical companies to the U.S. FDA.

In Portwood, a prescriber enters, at the prescriber computer, patient data and prescription data for drugs being prescribed for the patient. Patient data includes information such as the patient's name, social security number, and medical history such as prior adverse reactions to specific drugs. Prescription data includes such information as the patient's identification (e.g., social security number), the prescription GPI or NDC, and a prescribed dosage schedule. The prescription data includes similar information for other drugs the patient is currently taking. The prescriber computer then retrieves, from the central server computer, pharmaceutical data relating to each prescribed drug as well as each other drug the patient is currently taking. Using the pharmaceutical data, the prescriber computer checks each prescription to determine whether it is within the recommended dosage and duration ranges. The prescriber computer also uses the pharmaceutical data to determine whether any prescribed drug will cause an unacceptable

reaction with any other prescribed drug. In addition, the prescriber computer searches the patient data to determine whether the patient has ever reported any adverse reaction to any drug being prescribed.

Thus, the Portwood system uses pharmaceutical data to ensure the integrity of drug prescriptions created by a physician for a patient by verifying that the prescriptions meet recommended drug dosage and duration ranges, that the prescriptions do not cause any unacceptable interactions with each other, and that the patient has not previously reported an adverse reaction to any of the prescriptions.

## **2. The Rejection of Claims 1-49 over Portwood is Erroneous and Should be Overturned**

Claim 1 (an exemplary claim) recites:

1. A computer implemented method for processing prescription data representing a plurality of prescription drugs, said method comprising the steps of:
  - arranging received prescription data that corresponds to a first prescription drug into a new record of a predetermined format containing an identifier for identifying said patient and further containing a first name of said first prescription drug;
  - accessing a plurality of pre-stored records of said predetermined format, each pre-stored record containing information on a plurality of prescription drugs previously prescribed for respective patients;
  - comparing said identifier in said new record with each identifier located in the pre-stored records to find a matching pre-stored record associated with said patient;
  - comparing said first name of said first prescription drug with a second name of a second prescription drug located in the found matching pre-stored record; and
  - identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name.

The Applicant respectfully submits that Portwood fails to teach or suggest many if not all of the elements of claim 1. Specifically, as discussed further below, Portwood fails to teach or suggest at least the first and second comparing elements and the identifying element above.

Furthermore, Applicant respectfully submits that the Portwood system operates to achieve very different purposes than the methods and systems of the Application such that



Portwood does not suggest, but rather teaches away from the features of the methods and systems of the Application, and specifically the claimed features addressed below. As shown above, Portwood discusses a system which compares data describing drug dosages prescribed for a patient with data from pharmaceutical companies describing recommended dosage ranges for various drugs to determine whether the drug dosages prescribed for the patient comply with the recommended dosage ranges for the prescribed drugs. Thus, the Portwood system ensures the integrity of a drug prescription created by a physician for a patient by verifying that the prescription meets recommended standards for the prescribed drug.

In contrast, the methods and systems of the Application are designed to determine whether a prescribed drug is a new therapy start or a therapy switch for a patient. This use for the methods and systems of the Application is helpful to pharmaceutical companies in determining, among other things, when their marketing efforts have been successful in (a) persuading a health care specialist to prescribe a new drug therapy to a patient for a new illness, or (b) persuading a health care specialist to prescribe a therapy switch, e.g., a new drug for an existing illness for which the patient had been taking a different drug. Thus, the methods and systems of the Application do not check prescriptions against pharmaceutical data to verify their integrity, but rather, compare prescriptions against previous prescriptions for the same patient to determine whether a new therapy start has begun or a therapy switch has been made.

Consequently, for the reasons above and discussed more fully below, the Applicant respectfully submits that claim 1 is patentable over the cited reference, and respectfully requests that the rejection of claims 1-49 be overturned.

**a. Portwood Fails to Teach or Suggest the First and Second Comparing Elements of Claim 1**

In the December Office Action, the Examiner points to two teachings from Portwood and asserts that these teachings in combination meet the first and second comparing elements of claim 1. With regard to the first comparing element, the Examiner asserts that, although Portwood does not explicitly teach this element of claim 1 of the Application, Portwood does teach

[C]omparing patient's prescription data which includes but [sic] not limited to patient name, drug name, unit and strength (see column 6, lines 5-10 and column 6, lines 50-54) as well as comparing patient's prescription data including the duration and dosage range of a administered drug as transmitted by the reporting unit (see column 3, lines 5-10). (December Office Action, pp. 3-4).

The passages from Portwood cited by the Examiner above, and reproduced below in pertinent part, show that the comparing operation of Portwood that the Examiner refers to is the comparing of patient data and patient prescription data with pharmaceutical data:

[T]he CPU is further programmed to compare the patient data, the patient prescription data and the pharmaceutical data to determine if the patient prescription data is within an acceptable medication administering duration range as defined by the pharmaceutical data, and to transmit the determination to the reporting unit. (Col. 3, lines 5-10).

Thus, the passages of Portwood cited by the Examiner discuss comparing patient data and patient prescription data to pharmaceutical data. As described previously, this pharmaceutical data of Portwood is contained in records of the pharmaceutical database.

The first comparing element of claim 1 of the Application recites that the comparing is done "to find a matching pre-stored record associated with said patient." However, as described previously, in Portwood, the pharmaceutical data pre-stored for each drug in the pharmaceutical

database provides information that is relevant to all patients, such as recommended dosage levels and recommended dosage durations for the drug, and not information that is associated with any particular patient.

Furthermore, the first comparing limitation recites “comparing said identifier in said new record with each identifier located in the pre-stored records,” where “the pre-stored records” refers to the plurality of pre-stored records of the previous accessing element of claim 1 that recites that each pre-stored record contains information on drugs previously prescribed for patients. As mentioned above, in the first teaching of Portwood pointed to by the examiner, Portwood compares patient data and patient prescription data with pre-stored records of pharmaceutical data. Thus, the pre-stored records of Portwood referred to by the Examiner contain generic pharmaceutical industry information, and there is no disclosure or suggestion that these pre-stored records contain information on drugs previously prescribed for patients, as recited in claim 1 of the Application.

The second teaching from Portwood that the Examiner points to does not supply these deficiencies of finding a matching pre-stored record associated with said patient or comparing said new record with pre-stored records containing information on drugs previously prescribed for patients. In connection with the second comparing element of claim 1 of the Application, the Examiner states that

Portwood teaches a Prescribing Duration Check to calculate the prescribing duration for each new drug to be prescribed in a medical regimen (see: column 14, lines 40-58). The Examiner considers the Prescribing Duration Check to include comparing the first name of a first prescription drug with the second name of a second prescription drug located in the found matching pre-stored record to determine if a new drug is being prescribed to a patient’s regimen. (December Office Action, p. 4).

The passage from Portwood cited by the Examiner above, and reproduced below in pertinent part, shows that any comparing operation included in the “Prescribing Duration Check” of Portwood again involves the comparing of patient data and patient prescription data with pharmaceutical data:

(ii) Prescribing Duration Check ... [P]rescriber CPU 7 is programmed to calculate the prescribing duration for each new drug to be prescribed in a medical regimen. ... Prescriber CPU 7 is then programmed to search in step 631B the pharmaceutical data to determine if there is a recommended minimum prescribing duration period for the drug being checked. If none is found, then prescriber CPU 7 is programmed to generate and transmit to monitor 10 in step 631C a message, and then to proceed to step 631 D. ... Prescriber CPU 7 is programmed to then search the pharmaceutical data to determine in step 631D if there is a recommended maximum prescribing duration. If none is found, the prescriber CPU 7 is programmed to generate and transmit to monitor 10 in step 631E a message, and then proceed to step 631F. (Col. 14, lines 40-58).

In claim 1 of the Application, the second comparing element recites “comparing said first name of said first prescription drug with a second name of a second prescription drug located in the found matching pre-stored record,” where the “found matching pre-stored record” refers to the “matching pre-stored record associated with said patient” of the first comparing element.

However, as shown by the above, the Prescribing Duration Check of Portwood checks new drugs being prescribed against pharmaceutical data, which, as described previously, is not information that is associated with any particular patient and is not information on drugs previously prescribed for patients.

Thus, the first and second comparing elements of claim 1 of the Application recite a first comparing that finds a matching pre-stored record associated with said patient from pre-stored records containing information on drugs previously prescribed for patients and a second

comparing that operates on the found matching pre-stored record associated with said patient containing information on drugs previously prescribed for said patient, whereas the two teachings of Portwood, referred to by the Examiner in the December Office Action, as discussed above, involve pre-stored records of pharmaceutical data that are not associated with any particular patient and that do not contain information on drugs previously prescribed for patients. Therefore, the Applicant respectfully submits that the first and second comparing elements of claim 1 of the Application are not met or suggested by the combination of the two teachings of Portwood referred to by the Examiner, as discussed above, or any other art of record. For at least the reasons above, the Applicant respectfully requests that the rejection against claim 1 of the Application is erroneous and should be overturned.

**b. Portwood Fails to Teach or Suggest the Identifying Element of Claim 1**

In the December Office Action, the Examiner asserts that Portwood meets the element, in claim 1 of the Application, of “identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name,” since Portwood uses both the Generic Product Identifier (GPI) and National Drug Code (NDC) “to determine the drug used by a patient and to determine a new recommend [sic] or continuing medical regimen (see: column 7, lines 56-67).” (December Office Action, p. 3).

The passage cited above by the Examiner reads, in pertinent part, as follows:

For each drug in the pharmaceutical data base, this [pharmaceutical] data will include the prescription identification code (which will be found in the GPI or NDC identification codes), the GPI, the NDC and the KDC, the class of chemical components of the prescribed drug, the recommended unit dosage, the recommended standard daily dosage range, the recommended acute dosage range including the unit, daily, and prescribing duration acute ranges, the recommended maintenance unit, daily, and duration dosage range, and the recommended route, or routes, in which the drug is to be administered. (Col. 7, lines 56-67).

As shown by the above, this passage discloses the type of information stored in the pharmaceutical database used in Portwood. Applicant respectfully submits that, contrary to the Examiner's assertion, there is no disclosure or suggestion in the passage above of using GPI and NDC information to determine what drug a patient is taking or whether a drug is a new recommendation or a continuing medical regimen. Moreover, there is no disclosure or suggestion in the passage above of "identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name," as recited in claim 1.

In connection with the identifying element of claim 1 of the Application, the Examiner states that, in addition to the passage of Portwood discussed above:

Portwood further teaches a Prescribing Duration Check to calculate the prescribing duration for each new drug to be prescribed in a medical regimen (see: column 14, lines 40-58). This suggests that the calculation involved with prescribing duration for each new drug include a new therapy start. (December Office Action, p. 3).

The Applicant respectfully submits that, contrary to the assertion by the Examiner, the Prescribing Duration Check of Portwood referred to by the Examiner (reproduced above in connection with the discussion of the first and second comparing elements of claim 1) does not

disclose or suggest that the calculation of a prescribing duration include any identification of a drug as a new therapy start, as recited in the identifying element of claim 1 of the Application. The text of Portwood corresponding to the Prescribing Duration Check discusses how the Portwood system calculates a prescribing duration for a new drug prescription and then determines whether there is a recommended minimum or maximum prescribing duration for the drug. Thus, the Prescribing Duration Check of Portwood is concerned only with determining whether a new drug prescription meets the recommended guidelines for the drug stored in the pharmaceutical database. There is no need in the Prescribing Duration Check for the Portwood system to know or determine whether a prescribed drug is a new therapy start. Consequently, Applicant respectfully asserts that the Prescribing Duration Check of Portwood referred to by the Examiner does not fairly suggest the identifying of a drug as a new therapy start for the patient, as recited in claim 1 of the Application.

Therefore, for the reasons above, Applicant respectfully submits that Portwood fails to teach or suggest the identifying element of claim 1, and, for at least this reason, the Examiner's rejection of claim 1 should be overturned.

c. **Portwood Fails to Teach or Suggest the Comparing and Determining Elements of Claim 26**

Claim 26 recites:

26. A computer implemented method for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the method comprising:

receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;  
comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find all pre

stored prescription data records having a patient identifier matching the patient identifier of the first prescription data record;

identifying all the illnesses treatable by the drug being prescribed of the first prescription data record;

for each matching pre-stored prescription data record, identifying all the illnesses treatable by the drug being prescribed of the respective pre-stored prescription data record; and

determining whether the drug being prescribed of the first prescription data record is a therapy switch based on the illnesses treatable by the drug being prescribed of the first prescription and the illnesses treatable by any drug being prescribed of any of the matching pre stored prescription data records.

In the December Office Action, the Examiner acknowledges that Portwood fails to explicitly teach the comparing element of claim 26 of the Application, but asserts that this element is met by the combination of the two teachings of Portwood described above in connection with the first and second comparing elements of claim 1. As shown above, the comparing limitation of claim 26 compares the first prescription data record to the plurality of pre-stored prescription data records, where the preamble of claim 26 recites that the pre-stored records comprise patient identifiers identifying patients and drug identifiers identifying drugs being prescribed to the identified patients. As discussed above in connection with the first and second comparing elements of claim 1, in the two teachings of Portwood referred to by the Examiner, a new record is compared with pre-stored records of pharmaceutical data that are not associated with any particular patient, and so do not identify any patient, and that do not contain information on drugs prescribed for patients, as recited in claim 26.

Thus, for similar reasons as discussed above in connection with the first and second comparing elements of claim 1, Applicant respectfully submits that the comparing element of claim 26 of the Application is not met or suggested by the teachings of Portwood referred to by the Examiner or any other art of record. Therefore, Applicant respectfully submits that the



Examiner's rejection of claim 26 should be overturned.

In the December Office Action, the Examiner also asserts that Portwood meets the determining element of claim 26 of the Application. The passage of Portwood cited against this element of claim 26 reads, in pertinent part, as follows:

In the preferred embodiment, server computer station A is utilized to transmit messages to the patient. These messages will include prior notification of when and what medications the patient is scheduled to take in accordance with the prescribed medical regimen. (Col. 16, lines 41-43)

Server CPU 1 is programmed in step 1101 to first determine if it has received a command to stop further processing. This command is given if a fault in the system hardware or software has occurred, or if stoppage of the system is desired by the operator for any reason. If no halt command has been received, server CPU 1 is programmed in step 1102 to perform no message delivery function for a predetermined period of time. This period is to allow the prescriber to more easily and quickly access the CPU 1 to retrieve patient prescription data or pharmaceutical data, as well as to make and enter into the server data storage unit 2, any changes to the patient prescription data. (Col. 16, lines 54-58).

The determining element of claim 26 of the Application recites "determining whether the drug being prescribed of the first prescription data record is a therapy switch". As shown above, the passages of Portwood cited by the Examiner against this element of claim 26 discuss the operation of transmitting notification messages to patients and how that message transmission operation is not performed for a period of time if the system receives a command to stop processing. Applicant respectfully submits that the passages of Portwood cited by the Examiner do not disclose or in any way suggest the determination of whether a drug being prescribed is a therapy switch, as recited by the determining element of claim 26. Therefore, for at least the reasons provided above, Applicant respectfully submits that the determining element of claim 26 of the Application is not taught or suggested by the passages of Portwood cited by the Examiner

or any other art of record, and for at least these reasons, the Examiner's rejection of claim 26 should be overturned.

**d. All Pending Claims of the Application Are Patentable over Portwood**

For at least the reasons discussed above, Applicant respectfully submits that Portwood fails to teach or suggest many if not all of the elements of claims 1 and 26 of the Application, and therefore, claims 1 and 26 are patentably distinct over Portwood. Furthermore, since claims 1 and 26 are representative of all pending claims, Applicant respectfully submits that claims 1-49 of the Application are patentable over Portwood. Therefore, Applicant respectfully submits that the Examiner's rejection of all pending claims of the Application should be overturned and that all pending claims of the Application be allowed.

**IX. CONCLUSION**

In view of the foregoing, it is believed that all pending claims 1-49 are in proper condition for allowance, and the Board is respectfully requested to overturn the Examiner's rejection of these claims and to allow the claims.

A check in the amount of \$330.00 is enclosed which includes the Appeal Brief fee (\$330.00).

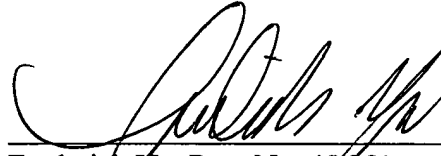
The Commissioner is hereby authorized to charge any additional fees which may be

required or credit any overpayment to the undersigned attorney's Deposit Account No.

02-4270.

Respectfully submitted,

Dated: November 5, 2003



Frederick Yu, Reg. No. 45,251  
BROWN RAYSMAN MILLSTEIN FELDER  
& STEINER LLP  
900 Third Avenue  
New York, New York 10022  
(212) 895-2000

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being  
deposited with the U.S. Postal Service as first  
class mail in an envelope addressed to:

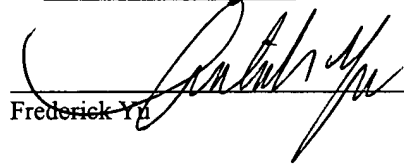
Mail Stop Appeal Brief- Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on November 5, 2003



Frederick Yu

**X. APPENDIX**

**Claims Currently Pending**

1. A computer implemented method for processing prescription data representing a plurality of prescription drugs, said method comprising the steps of:

arranging received prescription data that corresponds to a first prescription drug into a new record of a predetermined format containing an identifier for identifying said patient and further containing a first name of said first prescription drug;

accessing a plurality of pre-stored records of said predetermined format, each pre-stored record containing information on a plurality of prescription drugs previously prescribed for respective patients;

comparing said identifier in said new record with each identifier located in the pre-stored records to find a matching pre-stored record associated with said patient;

comparing said first name of said first prescription drug with a second name of a second prescription drug located in the found matching pre-stored record; and

identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name.

2. The method according to claim 1, further comprising determining whether types of said first and second names are brand or generic if said first name is not substantially identical to said second name, converting one of said first and second names to the type of the remaining name if the types are different, and ascertaining an equivalency between said first and second names based on the converted name.

3. The method according to claim 1, further comprising collecting the pre-stored records over a predetermined time interval.

4. The method according to claim 1, wherein said predetermined format further contains a date of dispensing said prescription drug to said patient and a dosage of said prescription drug.

5. The method according to claim 4, further comprising calculating a last day when said patient has taken said second prescription based on said date of dispensing and on said dosage if said first and last names are substantially identical, determining a length of time elapsed between said last day of taking said second prescription drug and a first day of dispensing said first prescription drug, and identifying said first prescription drug as newly prescribed for said patient if said length of time exceeds a predetermined time interval.

6. The method according to claim 4, further comprising obtaining each pre-stored record for said patient, accessing a list of illnesses to determine each illness treatable by each respective prescription drug contained in said each pre-stored record, accessing said list of illnesses to determine an illness treatable by said first prescription drug identified as newly prescribed, and ascertaining whether said first prescription drug is a replacement for another prescription drug previously taken by said patient.

7. The method according to claim 6, further comprising calculating a last day when said patient has taken said another prescription drug based on said date of dispensing and on said dosage, determining a length of time elapsed between said last day of taking said another prescription drug and a first day of dispensing said first prescription drug, and identifying said first prescription drug as said replacement if said length of time does not exceed a predetermined time interval.

8. The method according to claim 1, wherein said predetermined format further contains a prescriber name, a prescriber address, and a patient zip code.

9. The method according to claim 8, further comprising selecting every prescription drug identified as newly prescribed for each patient over a predetermined time interval, and sorting the selected prescription drugs according to at least one criterion selected from the following: a prescriber's name, a prescriber's address, a patient's zip code, a prescriber's specialty, a pharmaceutical sales territory, national-based reporting, ICD9 code.

10. A computer system for processing prescription data representing a plurality of prescription drugs, comprising:

means for arranging received prescription data that corresponds to a first prescription drug into a new record of a predetermined format containing an identifier for identifying said patient and further containing a first name of said first prescription drug;

means for accessing a plurality of pre-stored records of said predetermined format, each pre-stored record containing information on a plurality of prescription drugs previously prescribed for respective patients;

means for comparing said identifier in said new record with each identifier located in the pre-stored records to find a matching pre-stored record associated with said patient;

means for comparing said first name of said first prescription drug with a second name of a second prescription drug located in the found matching pre-stored record; and

means for identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name.

11. The system according to claim 10, further comprising means for determining whether types of said first and second names are brand or generic if said first name is not substantially identical to said second name, means for converting one of said first and second names to the type of the remaining name if the types are different, and means for ascertaining an equivalency between said first and second names based on the converted name.

12. The system according to claim 10, further comprising means for collecting the pre-stored records over a predetermined time interval.

13. The system according to claim 10, wherein said predetermined format further contains a date of dispensing said prescription drug to said patient and a dosage of said prescription drug.

14. The system according to claim 13, further comprising means for calculating a last day when said patient has taken said second prescription based on said date of dispensing and on said dosage if said first and last names are substantially identical, means for determining a length of time elapsed between said last day of taking said second prescription drug and a first day of dispensing said first prescription drug, and means for identifying said first prescription drug as newly prescribed for said patient if said length of time exceeds a predetermined time interval.

15. The system according to claim 13, further comprising means for obtaining each pre-stored record for said patient, means for accessing a list of illnesses to determine each illness treatable by each respective prescription drug contained in said each pre-stored record, means for accessing said list of illnesses to determine an illness treatable by said first prescription drug identified as newly prescribed, and means for ascertaining whether said first prescription drug is a replacement for another prescription drug previously taken by said patient.

16. The system according to claim 15, further comprising means for calculating a last day when said patient has taken said another prescription drug based on said date of dispensing and on said dosage, means for determining a length of time elapsed between said last day of taking said another prescription drug and a first day of dispensing said first prescription drug,



and means for identifying said first prescription drug as said replacement if said length of time does not exceed a predetermined time interval.

17. The system according to claim 10, wherein said predetermined format further contains a prescriber name, a prescriber address, and a patient zip code.

18. The system according to claim 17, further comprising means for selecting every prescription drug identified as newly prescribed for each patient over a predetermined time interval, and means for sorting the selected prescription drugs according to at least one criterion selected from the following: a prescriber's name, a prescriber's address, a patient's zip code, a prescriber's specialty, a pharmaceutical sales territory, national-based reporting, ICD9 code.

19. A computer-readable storage medium for storing a program code for, when executed, causing a computer to perform a method for processing prescription data representing a plurality of prescription drugs, said method comprising:

arranging received prescription data that corresponds to a first prescription drug into a new record of a predetermined format containing an identifier for identifying said patient and further containing a first name of said first prescription drug;

accessing a plurality of pre-stored records of said predetermined format, each pre-stored record containing information on a plurality of prescription drugs previously prescribed for respective patients;

comparing said identifier in said new record with each identifier located in the pre-stored records to find a matching pre-stored record associated with said patient;

comparing said first name of said first prescription drug with a second name of a second prescription drug located in the found matching pre-stored record; and

identifying said first prescription drug as a new therapy start for said patient if said first name is not substantially identical to said second name.

20. A computer implemented method for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the method comprising:

receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find a pre stored prescription data record having a patient identifier matching the patient identifier of the first prescription data record;

determining whether the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record;

identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the drug identifier of the first prescription data record is not related to the drug identifier of the matching pre-stored prescription data record.

21. The method of claim 20, where the step of determining comprises identifying the drug identifier of the matching pre-stored prescription data record as being related to the drug identifier of the first prescription data record if the drug identifier of the matching pre-stored prescription data record matches the drug identifier of the first prescription data record.

22. The method of claim 21, where a drug identifier is of one of two types, one type of drug identifier being an identifier to a brand name drug and the other type of drug identifier being an identifier to a generic drug corresponding to a brand name drug, and where the step of determining comprises:

prior to the step of identifying, if the drug identifier of the matching pre-stored prescription data record and the drug identifier of the first prescription data record are not of the same type, converting either the drug identifier of the matching pre-stored prescription data record or the drug identifier of the first prescription data record to the other type of drug identifier.

23. The method of claim 22, where a database provides a correspondence between brand name drugs and their corresponding generic drugs, and where the step of converting comprises:

if the drug identifier being converted is of the type that identifies a brand name drug, searching the database to find the generic drug corresponding to the brand name drug identified

by the drug identifier being converted and modifying the drug identifier being converted to identify the found generic drug; and

if the drug identifier being converted is of the type that identifies a generic drug, searching the database to find the brand name drug corresponding to the generic drug identified by the drug identifier being converted and modifying the drug identifier being converted to identify the found brand name drug.

24. The method of claim 20, where the plurality of pre-stored prescription data records are collected over a predetermined time interval.

25. The method of claim 20, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the method further comprises:

if the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record, calculating a last day the drug being prescribed of the matching pre-stored prescription data record was taken based on the dispensing date and drug dosage for the drug being prescribed of the matching pre-stored prescription data record;

determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the length of time determined exceeds a predetermined time interval.

26. A computer implemented method for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the method comprising:

receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find all pre stored prescription data records having a patient identifier matching the patient identifier of the first prescription data record;

identifying all the illnesses treatable by the drug being prescribed of the first prescription data record;

for each matching pre-stored prescription data record, identifying all the illnesses treatable by the drug being prescribed of the respective pre-stored prescription data record; and

determining whether the drug being prescribed of the first prescription data record is a therapy switch based on the illnesses treatable by the drug being prescribed of the first

prescription and the illnesses treatable by any drug being prescribed of any of the matching pre stored prescription data records.

27. The method of claim 26, where a database lists the illnesses treatable by drugs, and where the step of identifying all the illnesses treatable by a drug being prescribed comprises: for a given drug being prescribed, searching the database to find the given drug; and identifying all the illnesses listed in the database as treatable by the found drug.

28. The method of claim 26, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the step of determining comprises:

identifying one of the plurality of pre-stored prescription data records where the drug being prescribed of the identified record treats an illness that the drug being prescribed of the first prescription data record also treats;

calculating a last day the drug being prescribed of the identified record was taken based on the dispensing date and drug dosage for the drug being prescribed of the identified record;

determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

identifying the drug being prescribed to the first patient as a therapy switch for the first patient if the length of time determined does not exceed a predetermined time interval.

29. A computer system for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the system comprising:

means for receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

means for comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find a pre-stored prescription data record having a patient identifier matching the patient identifier of the first prescription data record;

means for determining whether the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record;

means for identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the drug identifier of the first prescription data record is not related to the drug identifier of the matching pre-stored prescription data record.

30. The system of claim 29, where the means for determining identifies the drug identifier of the matching pre-stored prescription data record as being related to the drug

identifier of the first prescription data record if the drug identifier of the matching pre-stored prescription data record matches the drug identifier of the first prescription data record.

31. The system of claim 30, where a drug identifier is of one of two types, one type of drug identifier being an identifier to a brand name drug and the other type of drug identifier being an identifier to a generic drug corresponding to a brand name drug, and where the means for determining comprises:

means for converting either the drug identifier of the matching pre-stored prescription data record or the drug identifier of the first prescription data record to the other type of drug identifier if the drug identifier of the matching pre-stored prescription data record and the drug identifier of the first prescription data record are not of the same type.

32. The system of claim 31, where a database provides a correspondence between brand name drugs and their corresponding generic drugs, and

where the means for converting searches the database to find the generic drug corresponding to the brand name drug identified by the drug identifier being converted and modifies the drug identifier being converted to identify the found generic drug if the drug identifier being converted is of the type that identifies a brand name drug, and

where the means for converting searches the database to find the brand name drug corresponding to the generic drug identified by the drug identifier being converted and modifies the drug identifier being converted to identify the found brand name drug if the drug identifier being converted is of the type that identifies a generic drug.



33. The system of claim 29, where the plurality of pre-stored prescription data records are collected over a predetermined time interval.

34. The system of claim 29, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the system further comprises:

means for calculating a last day the drug being prescribed of the matching pre-stored prescription data record was taken based on the dispensing date and drug dosage for the drug being prescribed of the matching pre-stored prescription data record if the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record;

means for determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

means for identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the length of time determined exceeds a predetermined time interval.

35. A computer system for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a

drug identifier identifying a drug being prescribed to the identified patient of the respective record, the system comprising:

means for receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

means for comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find all pre-stored prescription data records having a patient identifier matching the patient identifier of the first prescription data record;

means for identifying all the illnesses treatable by the drug being prescribed of the first prescription data record;

means for identifying, for each matching pre-stored prescription data record, all the illnesses treatable by the drug being prescribed of the respective pre-stored prescription data record; and

means for determining whether the drug being prescribed of the first prescription data record is a therapy switch based on the illnesses treatable by the drug being prescribed of the first prescription and the illnesses treatable by any drug being prescribed of any of the matching pre-stored prescription data records.

36. The system of claim 35, where a database lists the illnesses treatable by drugs, and where the means for identifying all the illnesses treatable by a drug being prescribed comprises:

means for searching the database, for a given drug being prescribed, to find the given drug; and

means for identifying all the illnesses listed in the database as treatable by the found drug.

37. The system of claim 35, where the means for determining identifies the drug being prescribed of the first prescription data record as a therapy switch if any illness treatable by the drug being prescribed of the first prescription data record matches any illness treatable by any drug being prescribed of any of the matching pre-stored prescription data records.

38. The system of claim 35, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the means for determining comprises:

means for identifying one of the plurality of pre-stored prescription data records where the drug being prescribed of the identified record treats an illness that the drug being prescribed of the first prescription data record also treats;

means for calculating a last day the drug being prescribed of the identified record was taken based on the dispensing date and drug dosage for the drug being prescribed of the identified record;

means for determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

means for identifying the drug being prescribed to the first patient as a therapy switch for the first patient if the length of time determined does not exceed a predetermined time interval.

39. A computer program product comprising a computer usable medium having computer readable code embodied therein, the computer readable code, when executed, causing a computer to implement a method for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the method comprising:

receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find a pre stored prescription data record having a patient identifier matching the patient identifier of the first prescription data record;

determining whether the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record;

identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the drug identifier of the first prescription data record is not related to the drug identifier of the matching pre-stored prescription data record.

40. The computer program product of claim 39, where the step of determining comprises identifying the drug identifier of the matching pre-stored prescription data record as being related to the drug identifier of the first prescription data record if the drug identifier of the matching pre-stored prescription data record matches the drug identifier of the first prescription data record.

41. The computer program product of claim 39, where a drug identifier is of one of two types, one type of drug identifier being an identifier to a brand name drug and the other type of drug identifier being an identifier to a generic drug corresponding to a brand name drug, and where the step of determining comprises:

prior to the step of identifying, if the drug identifier of the matching pre-stored prescription data record and the drug identifier of the first prescription data record are not of the same type, converting either the drug identifier of the matching pre-stored prescription data record or the drug identifier of the first prescription data record to the other type of drug identifier.

42. The computer program product of claim 39, where a database provides a correspondence between brand name drugs and their corresponding generic drugs, and where the step of converting comprises:

if the drug identifier being converted is of the type that identifies a brand name drug, searching the database to find the generic drug corresponding to the brand name drug identified

by the drug identifier being converted and modifying the drug identifier being converted to identify the found generic drug; and

if the drug identifier being converted is of the type that identifies a generic drug, searching the database to find the brand name drug corresponding to the generic drug identified by the drug identifier being converted and modifying the drug identifier being converted to identify the found brand name drug.

43. The computer program product of claim 39, where the plurality of pre-stored prescription data records are collected over a predetermined time interval.

44. The computer program product of claim 39, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the method further comprises:

if the drug identifier of the matching pre-stored prescription data record is related to the drug identifier of the first prescription data record, calculating a last day the drug being prescribed of the matching pre-stored prescription data record was taken based on the dispensing date and drug dosage for the drug being prescribed of the matching pre-stored prescription data record;

determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

identifying the drug being prescribed to the first patient as a new therapy start for the first patient if the length of time determined exceeds a predetermined time interval.

45. A computer program product comprising a computer usable medium having computer readable code embodied therein, the computer readable code, when executed, causing a computer to implement a method for processing prescription data using a plurality of pre-stored prescription data records, each of which comprises a patient identifier identifying a patient and a drug identifier identifying a drug being prescribed to the identified patient of the respective record, the method comprising:

receiving a first prescription data record comprising a patient identifier identifying a first patient and a drug identifier identifying a drug being prescribed to the first patient;

comparing the patient identifier of the first prescription data record to the patient identifier of each of the plurality of pre-stored prescription data records to find all pre stored prescription data records having a patient identifier matching the patient identifier of the first prescription data record;

identifying all the illnesses treatable by the drug being prescribed of the first prescription data record;

for each matching pre-stored prescription data record, identifying all the illnesses treatable by the drug being prescribed of the respective pre-stored prescription data record; and

determining whether the drug being prescribed of the first prescription data record is a therapy switch based on the illnesses treatable by the drug being prescribed of the first prescription and the illnesses treatable by any drug being prescribed of any of the matching pre-stored prescription data records.

46. The computer program product of claim 45, where a database lists the illnesses treatable by drugs, and where the step of identifying all the illnesses treatable by a drug being prescribed comprises:

for a given drug being prescribed, searching the database to find the given drug; and  
identifying all the illnesses listed in the database as treatable by the found drug.

47. The computer program product of claim 45, where the step of determining comprises identifying the drug being prescribed of the first prescription data record as a therapy switch if any illness treatable by the drug being prescribed of the first prescription data record matches any illness treatable by any drug being prescribed of any of the matching pre-stored prescription data records.

48. The computer program product of claim 45, where each of the plurality of pre-stored prescription data records further comprises a dispensing date on which the drug being prescribed of the respective record was dispensed and a drug dosage describing the dosage prescribed for the drug being prescribed of the respective record, and where the first prescription



data record further comprises a dispensing date on which the drug being prescribed of the first prescription data record was dispensed, and where the step of determining comprises:

identifying one of the plurality of pre-stored prescription data records where the drug being prescribed of the identified record treats an illness that the drug being prescribed of the first prescription data record also treats;

calculating a last day the drug being prescribed of the identified record was taken based on the dispensing date and drug dosage for the drug being prescribed of the identified record;

determining a length of time between the last day calculated and the dispensing date of the drug being prescribed of the first prescribed data record; and

identifying the drug being prescribed to the first patient as a therapy switch for the first patient if the length of time determined does not exceed a predetermined time interval.

49. The method of claim 26, where the step of determining comprises identifying the drug being prescribed of the first prescription data record as a therapy switch if any illness treatable by the drug being prescribed of the first prescription data record matches any illness treatable by any drug being prescribed of any of the matching pre-stored prescription data records.



AF/3626-#

TRANSMITTAL LETTER

Atty Docket No.: 3207-22US

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RECEIVED

NOV 18 2003

GROUP 3300

Re: Applicant(s) : Kleinfelter  
Serial No. : 09/348,774  
Filed : July 7, 1999  
Title : PRESCRIPTION DATA PROCESSING SYSTEM FOR  
DETERMINING NEW THERAPY STARTS

Kindly file the annexed papers indicated below:

- ☒ Appeal Brief (18 pages plus Appendix of 22 pages)  
☒ Petition for Extension of Time (3 months)  
☒ 1 Sheet of drawing (Fig. 1)  
☐ An additional fee is required. The fee has been calculated as follows:

	Claims Remaining after Amendment	Claims Paid for	Extra	Rate (Sm. Ent.)	Fee	Rate	Fee
Total	49	49	0	x \$9	\$	x \$18	\$
Indep.	9	9	0	x \$43	\$	x \$86	\$
MULTIPLE DEPENDENT CLAIM ADDED				+ \$145	\$	+ \$290	\$
TOTAL					\$		\$

☒ Two checks in the amounts of \$860.00 (\$330.00 Appeal Brief + \$530.00 1<sup>st</sup> and 2<sup>nd</sup> Months Extensions of Time) and \$420.00 (3<sup>rd</sup> Month Extension of Time) are enclosed.

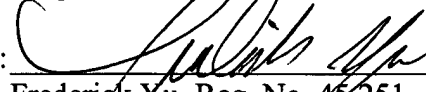
☐ The Commissioner is hereby authorized to charge the fee of \$\_\_\_\_.00 to the undersigned attorney's Deposit Account No. 02-4270.

The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to the undersigned attorney's Deposit Account No. 02-4270.

Respectfully submitted,

Dated: November 5, 2003

By:

  
Frederick Yu, Reg. No. 45,251  
BROWN RAYSMAN MILLSTEIN  
FELDER & STEINER LLP  
Attorney for Applicants  
900 Third Avenue  
New York, New York 10022  
(212) 895-2000

11/14/2003 AWONDAF1 00000077 09348774

02 FC:1253

950.00 OP

I hereby certify that this paper is being deposited this date with the U.S. Postal Service as First Class Mail addressed to: Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450

Frederick Yu

Date